

Amended claim 1 and claims 2 and 4-8 depending from claim 1 are patentable at least because the above reproduced features are not anticipated by Bergamo alone or in combination with Grasso. Moreover, the dependent claims include additional patentably features. For example, claim 2 recites that "the numbers representing how many signal lights to be allocated consecutively in groups are set to different values corresponding to wavelength bands so that a four-wave mixing crosstalk amount calculated for each wavelength corresponding to said wavelength grids is equal to or less than a previously set tolerance value." The Office Action alleges that the above-reproduced feature of claim 2 is anticipated by disclosure in col. 5 lines (1) 40-43 and (2) 52-58 of Bergamo. The indicated paragraphs merely comment that (1) having adjacent channels with different state of polarization lower the four-wave mixing, and (2) wider guard-bands in-between the groups minimizes the four-wave mixing. However the number of wavelength in a group in Bergamo is not **set** to different values in order to satisfied the condition that a four-wave mixing crosstalk amount **calculated for each wavelength** corresponding to said wavelength grids **is equal to or less than a previously set tolerance value**. In other words, claim 2 distinguishes from Bergamo because:

- the number of wavelength in a group is not set in Bergamo it is a given fixed number;
- Bergamo does not teach or suggest calculating the four-wave mixing crosstalk amount for each wavelength; and
- the number of wavelength in a group is not set such as the calculated four-wave mixing crosstalk amount for each wavelength to be equal to or less than a previously set tolerance value.

Independent claim 9 is amended herewith similar with claim 1 to specify that "the numbers representing how many signal lights to be allocated consecutively in groups of consecutively allocated wavelengths are smaller in a short wavelength side than in a long wavelength side of the wavelength grid." Claims 9 and 10 patentably distinguish over the cited prior art at least because claim 9 recites the above-reproduced feature.

Amended independent claim 11 patentably distinguishes over the cited prior art at least by reciting that "the predetermined numbers representing how many signal lights to be allocated consecutively in groups of consecutively allocated wavelengths are smaller in a short wavelength side than in a long wavelength side of the equally spaced wavelength grid."

## CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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